

REMARKS

In the Office Action mailed July 15, 2004, the Examiner allowed claims 1-5, 8-11, 13-16, 20, 26 and 30-33, rejected claims 6, 7, 12, 17-19, 21-25, 27-29 and 34-36 and objected to claims 17, 25 and 35. By way of the foregoing amendments and the markings to show changes, Applicants have amended claims 1, 4, 6, 7, 8, 12, 17, 21, 30, 32, 33 and 35, canceled claims 19, 20, 25, 31 and 34 and added new claims 37-44. The foregoing amendments are taken in the interest of expediting prosecution and there is no intention of surrendering any range of equivalents to which Applicant would otherwise be entitled in view of the prior art.

I. Information Disclosure Statement

The Office Action indicated that U.S. Provisional Application Serial No. 60/122704 was not considered because the title of the reference on the Applicants' IDS does not correspond to the title of the actual document provided. After investigation of this reference, Applicants have determined that two references the Applicants desired to cite were combined into a single entry. Applicants submit herewith the two references in a Supplemental Information Disclosure Statement.

II. Claim Objections

The Office Action objected to claim 17 because the word "electromagnetic" was misspelled. Such spelling has been corrected.

The Office Action objected to claim 25, but claim 25 has been canceled making such objection moot.

The Office Action objected to claim 35 for having two steps (b) and no step (a). The claim has been amended to correct such problem.

III. Claim Rejections under 35 U.S.C. 112

The Office Action rejected claim 12 for lack of proper antecedent basis. Applicants have amended claim 12 and others to address this rejection.

IV. Claim Rejections under 35 U.S.C. 102 and 103

The Office Action rejected claims 6, 7, 12, 17-19, 21-25, 27-29 and 34-36 as being anticipated by or obvious in view of one or both of the following references: Hajduk et al. (US Patent 6,535,284) and Nicolich et al. (US Patent 6,697,454). Applicants have amended the claims to both add and remove language from the claims. As such, Applicants believe that the above mentioned rejections are moot. Applicants also realize that the Examiner in this case may have to further consider other claims of this application in view of the amendments. As such, Applicants discuss below at least some of the amendments that have been made below.

Claim 1

Language has been removed from claim 1 and the removal of that language broadens aspects of claim 1. Language has also been added to claim 1 further specifying the electromagnetic wavefront of that claim. Applicants believe that claim 1 distinguishes the references of record and should be allowable.

Claim 17

Language has been removed from claim 17 and the removal of that language broadens aspects of claim 17. Language has also been added to claim 17 further specifying the electromagnetic wavefront of that claim and further specifying the thickness of the sample materials. Applicants believe that claim 17 distinguishes the references of record and should be allowable.

Applicants particularly draw the Examiner's attention to Fig. 11 of the Nicolich et al. reference and col. 10, lines 27-50 of its specification. The Office Action has suggested that this portion of the Nicolich et al. reference discloses "thickness" measurements for "material samples". In this regard, Applicants contend that the system of Nicolich et al., due to its use of X-rays and due to the components of the system, would be unable to measure thicknesses of the degree presently recited in claim 17 and other claims. In particular, as can be seen in Fig. 11, the X-Ray system of Nicolich et al. must use extreme angles of incidence and/or reflection. Applicants contend that these extreme angles make larger thicknesses (e.g., thicknesses greater than 1 or 10 microns) impossible to discern for the system of the Nicolich et al. reference.

Claim 30

Claim 30 has been broadened.

Claim 35

Language has been removed from claim 35 and the removal of that language broadens aspects of claim 35. Language has also been added to claim 35 further specifying the electromagnetic wavefront of that claim and further specifying a relationship between a wavefront source and a sensor. Applicants believe that claim 35 distinguishes the references of record and should be allowable.

Applicants again draw the Examiner's attention to Fig. 11 of the Nicolich et al. reference and col. 10, lines 27-50 of its specification. Applicants contend that the system of Nicolich et al. does not disclose a wavefront source adjacent a sensor for correlating electromagnetic wavefronts to thicknesses. In particular, as can be seen in Fig. 11, the X-Ray system of Nicolich et al., as suggested earlier, use and depend upon extreme angles of incidence and/or reflection. Applicants contend that these extreme angles make a system with a wavefront source adjacent to a sensor, at the very least, highly unlikely.

U.S. Patent 6,535,284 to Hajduk et al.

Applicants also point out that Hajduk et al. is not a proper anticipatory reference for any of the claims of the present application. Generally speaking, Hajduk et al. typically discloses adjusting the thickness of samples in a predetermined manner by altering the size of a gap between two members or plates and monitoring, measuring or determining properties (e.g., birefrigerance) during or after such adjustments. Applicants contend that the claims of the present application differ from Hajduk et al. For example, Hajduk et al. does not teach correlation of wavefront responses to topography in the manner described and claimed in the present application. As another example, Hajduk et al. does not teach correlation of a reflected wavefront to thickness in the manner described and claimed in the present application.

By amending the application, the Applicants do not concede that the patent coverage available to them would not extend as far as the original claim. Rather, Applicants intend to file a continuation application to pursue the breadth of the claims as filed. Applicants believe that the Examiner has not made a sufficient showing of inherency of the teachings of the asserted prior art, especially given the lack of teachings in the cited references of the properties that Applicants have recited in their claims.

Further, by the present amendment, it does not follow that the amended claims have become so perfect in their description that no one could devise an equivalent. After amendment, as before, limitations in the ability to describe the present invention in language in the patent claims naturally prevent the Applicants from capturing every nuance of the invention or describing with complete precision the range of its novelty or every possible equivalent. See, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 62 USPQ2d 1705 (2002). Accordingly, the foregoing amendments are made specifically in the interest of expediting prosecution and there is no intention of surrendering any range of equivalents to which Applicants would otherwise be entitled.

PETITION FOR EXTENSION OF TIME

Applicants respectfully request and petition an appropriate extension of time to respond to the outstanding Office Action, of at least one month. The Commissioner is authorized to charge the fee of \$55.00 to deposit account 50-0496. For any deficiencies, please charge Deposit Account No. 50-0496 for any fee which may be due.

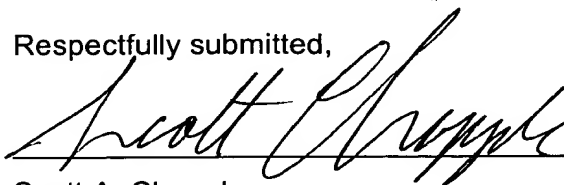
CONCLUSIONS

In view of Applicants' amendments and remarks, the Examiner's rejections are believed to be rendered moot. Accordingly, Applicants submit that the present application is in condition for allowance and requests that the Examiner pass the case to issue at the earliest convenience. Should the Examiner have any question or wish to further discuss this application, Applicant requests that the Examiner contact the undersigned at (248) 292-2920.

If for some reason Applicant has not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent the abandonment of this application, please consider this as a request for an extension for the required time period and/or authorization to charge our Deposit Account No. 50-0496 for any fee which may be due.

Dated: 2 November, 2004

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Scott A. Chapple", written over a horizontal line.

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